

Abstract Submitted
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Spin polarized transport properties of impurity induced Carbon nanostructures SERKAN CALISKAN¹, Fatih University, MEHMET CANTURK, Atilim University — We study spin polarized transport on structures consisting of Carbon wires including impurities. We perform first principle calculations on these structures using the nonequilibrium Green Function formalism combined with the density functional theory. The different impurity induced Carbon nanostructures are found to depend strongly on the geometrical disorder. Through the conductance, transmission spectra, density of states and current-voltage characteristics the numerical results of spin polarized calculations are discussed.

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